

IN THE CLAIMS:

Please amend claims as follows:

1. (Previously Presented) An apparatus, comprising:
a base module positioned within a stack, said stack being associated with a node of a wireless local area network, and said wireless local area network being configured to communicate with an external wired network;
an antenna module positioned within said stack; and
one or more wireless modules positioned within said stack and coupled to the base and antenna modules,
wherein each of said wireless modules is configured to perform automatic self-discovery by automatically determining a position of said each of the wireless modules within the stack, by automatically identifying other wireless modules in the stack, and by automatically determining whether said each of said wireless modules is configured to communicate with said external wired network via a wired or wireless communication link.
2. (Previously Presented) The apparatus of claim 1, wherein said determining whether said each of said wireless modules is configured to communicate with said external wired network via a wired or wireless communication link is provided by determining whether a Dynamic Host Configuration Protocol was received wirelessly or via a wired ETHERNET connection.
3. (Previously Presented) The apparatus of claim 1, wherein at least one of said wireless modules comprises a

finite state machine configured to perform said automatic self-discovery.

4. (Previously Presented) The apparatus of claim 1, wherein at least two of said one or more wireless modules employ different short-range wireless protocols .

5. (Previously Presented) The apparatus of claim 4, wherein said different short-range wireless protocols comprise at least two different IEEE 802.11-type protocols, or a combination of at least one of said one or more IEEE 802.11-type protocols and a BLUETOOTH protocol.

6-37. (Cancelled)

38. (Previously Presented) The apparatus of claim 1, wherein said apparatus is configured to communicate wirelessly with one or more mobile units within said wireless local area network.

39. (Previously Presented) The apparatus of claim 1, wherein said apparatus is configured to provide connectivity to the said external wired network.

40. (Currently amended) The apparatus of claim 2 ~~[[1]]~~, wherein a role of said each of said wireless modules, to be an access point or a wireless backhaul, is determined by said a Dynamic Host Configuration Protocol being received wirelessly or via the wired ETHERNET connection, by said position of said each of the wireless modules within said stack, and by functionality of said other

modules of said stack identified using said self-discovery.

41. (Previously Presented) A method, comprising:
performing, by each of wireless modules comprised in a stack associated with a node of a wireless local area network, an automatic self-discovery by automatically determining a position of said each of the wireless modules within said stack, by automatically identifying other wireless modules in the stack, and by automatically determining whether said each of said wireless modules is configured to communicate with an external wired network via a wired or wireless communication link,

wherein said stack further comprises a base module and an antenna module, said wireless local area network is configured to communicate with said external wired network, and said each of said one or more wireless modules are coupled to said base and antenna modules.

42. (Previously Presented) The method of claim 41, wherein said determining whether said each of said wireless modules is configured to communicate with said external wired network via a wired or wireless communication link is provided by determining whether a Dynamic Host Configuration Protocol was received wirelessly or via a wired ETHERNET connection.

43. (Previously Presented) The method of claim 41, wherein one or more of said wireless modules comprise a finite state machine configured to perform said automatic self-discovery.

44. (Previously Presented) The method of claim 41, wherein at least two of said one or more wireless modules employ different short-range wireless protocols .

45. (Previously Presented) The method of claim 44, wherein said different short-range wireless protocols comprise at least two different IEEE 802.11-type protocols, or a combination of at least one of said one or more IEEE 802.11-type protocols and a BLUETOOTH protocol.

46. (Previously Presented) The method of claim 41, wherein one or more of said wireless modules are configured to communicate wirelessly with one or more mobile units within said wireless local area network.

47. (Previously Presented) The method of claim 41, wherein a role of said each of said wireless modules, to be an access point or a wireless backhaul, is determined by said Dynamic Host Configuration Protocol being received wirelessly or via the wired ETHERNET connection, by said position of said each of the wireless modules within said stack, and by functionality of said other modules of said stack identified using said self-discovery.

48. (Previously Presented) A computer software product, comprising a computer-usable medium having computer readable instructions stored thereon for execution by a processor to perform a method comprising:

performing, by each of wireless modules comprised in a stack associated with a node of a wireless local area

network, an automatic self-discovery by automatically determining a position of said each of the wireless modules within said stack, by automatically identifying other wireless modules in the stack, and by automatically determining whether said each of said wireless modules is configured to communicate with an external wired network via a wired or wireless communication link,

wherein said stack further comprises a base module and an antenna module, said wireless local area network is configured to communicate with said external wired network, and said each of said one or more wireless modules are coupled to said base and antenna modules.

49. (Previously Presented) The computer software product of claim 48, wherein said determining whether said each of said wireless modules is configured to communicate with said external wired network via a wired or wireless communication link is provided by determining whether a Dynamic Host Configuration Protocol was received wirelessly or via a wired ETHERNET connection.

50. (Previously Presented) The computer software product of claim 48, wherein one or more of said wireless modules comprise a finite state machine configured to perform said automatic self-discovery.

51. (Previously Presented) The computer software product of claim 48, wherein at least two of said one or more wireless modules employ different short-range wireless protocols .

52. (Previously Presented) The computer software product of claim 51, wherein said different short-range wireless protocols comprise at least two different IEEE 802.11-type protocols, or a combination of at least one of said one or more IEEE 802.11-type protocols and a BLUETOOTH protocol.

53. (Currently Amended) The computer software product method of claim 48, wherein said one or more of said wireless modules are configured to communicate wirelessly with one or more mobile units within said wireless local area network.

54. (Currently Amended) The computer software product method of claim 48, wherein a role of said each of said wireless modules, to be an access point or a wireless backhaul, is determined by said a Dynamic Host Configuration Protocol being received wirelessly or via the wired ETHERNET connection, by said position of said each of the wireless modules within said stack, and by functionality of said other modules of said stack identified using said self-discovery.